



Vibrating Pillow

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PARTS:

- [Battery holder \(1\)](#)
- [Batteries \(2\)](#)
- [Plastic spoon \(1\)](#)
- [Pager motor \(1\)](#)
[Pager or cellphone vibrator motor.](#)
- [Push button \(1\)](#)
[Arcade push button switch easily found on eBay.](#)
- [Fabric \(1\)](#)
[for pillow cover.](#)
- [Interfacing fabric \(1\)](#)
[thicker than cover fabric.](#)
- [Velcro \(1\)](#)
- [Thread \(1\)](#)
- [Stuffing \(1\)](#)
- [Wire \(1\)](#)
- [Soldering iron \(1\)](#)
- [Solder \(1\)](#)
- [Tape \(1\)](#)
- [Hot glue gun \(1\)](#)

- [Sewing machine \(1\)](#)
[or needle and thread if you want to do it by hand.](#)

SUMMARY

By Annie Shao and Rachel McConnell

There are pillows that look good, and there are pillows that feel good. For those inclined to add a little buzz to their home décor, try making this fun vib-illow. Take an arcade push button, a couple of batteries, and a cellphone vibrator and you've got a super simple circuit that anyone can make. Then push the button to discover the pillow's secret surprise.

If you've never soldered, don't fret. We've got a [soldering tutorial for you](#).

Step 1 — Make the pillow.



- Draw a pattern for your pillow on paper. Start with a simple shape, such as a circle or a heart. This line is your sew line. Add 5/8" around every edge to allow yourself room for sewing. This new line is your cut line. Cut out the paper pattern following the cut line. Transfer both the sew line and the cut line from the paper pattern onto the back of the fabric. (If you'd like to use fur, we advise using it only for the front of the pillow to reduce bulk and make it easier to sew and reduce bulk.) Do this twice, so you have 2 pieces of fabric, 1 for the front of your pillow and 1 for the back. If your pattern isn't symmetrical, cut the back piece with the pattern reversed so that the front of the backing fabric is on the outside of the pillow.
- Cut out your fabric following the cut line. If cutting fur, it's easier to cut the back of the fabric by sliding your scissors under the backing of the fur fabric instead of cutting the fur pile.

Step 2 — Assemble the button switch.



- Disassemble the arcade button and switch assembly. You should have 3 parts: the plastic pressable button with screw threads, the matching plastic nut, and the actual microswitch (aka “cherry switch”) with leads that can be soldered.
- Mark on the back of the fabric where you want the button to go, then cut out a hole slightly smaller than the actual button, so the fit is tight. Cut a piece of interfacing that’s a couple of inches larger than the hole in the fabric, then cut a hole in the interfacing the same size as the hole in the fabric. The interfacing adds extra bulk and stiffness for the button nut to grab onto, so it won’t fall out when pressed. If your interfacing is the iron-on type, iron it onto the back of the fabric, matching up the holes. If it’s not iron-on, just pin it together while you attach the button.
- Attach the button to the fabric. Place it through the fabric and interfacing from the front, then screw the nut on from the back, so the button is held in place as if the fabric were the arcade cabinet the button originally came from.

Step 3 — Attach the Velcro.



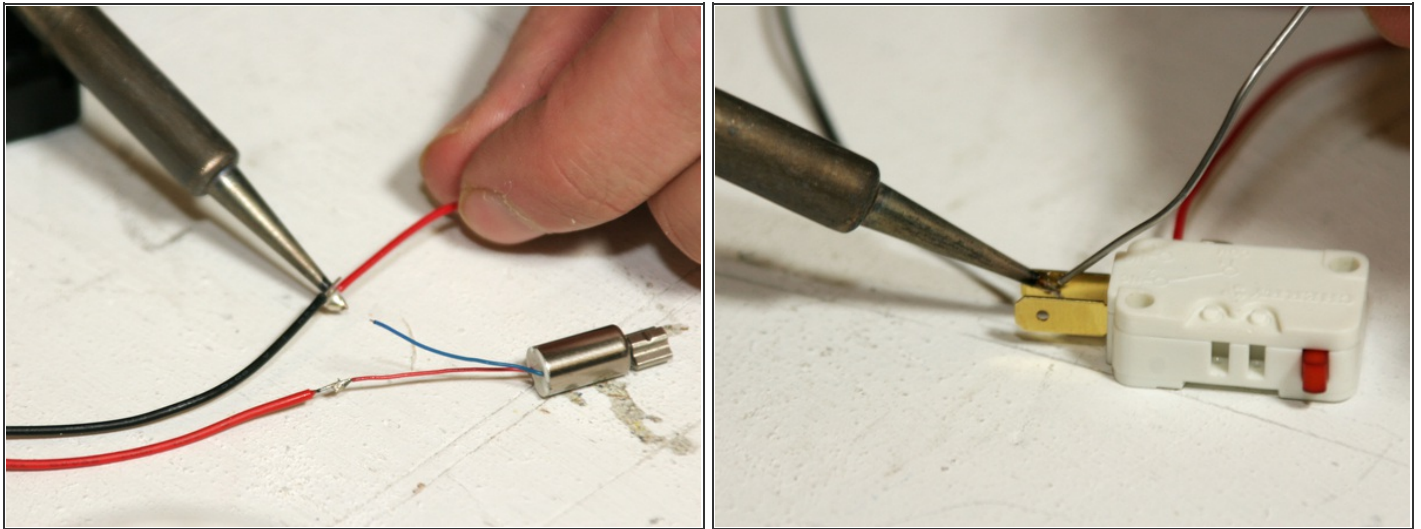
- Cut 2 pieces of Velcro 4"–6" long, one of the hook side and one of the loop side. Sew one to the front of the pillow (right side), along the edge, between the cut line and the sew line. Sew the other to the matching area on the back of the pillow.

Step 4 — Put the pillow together.



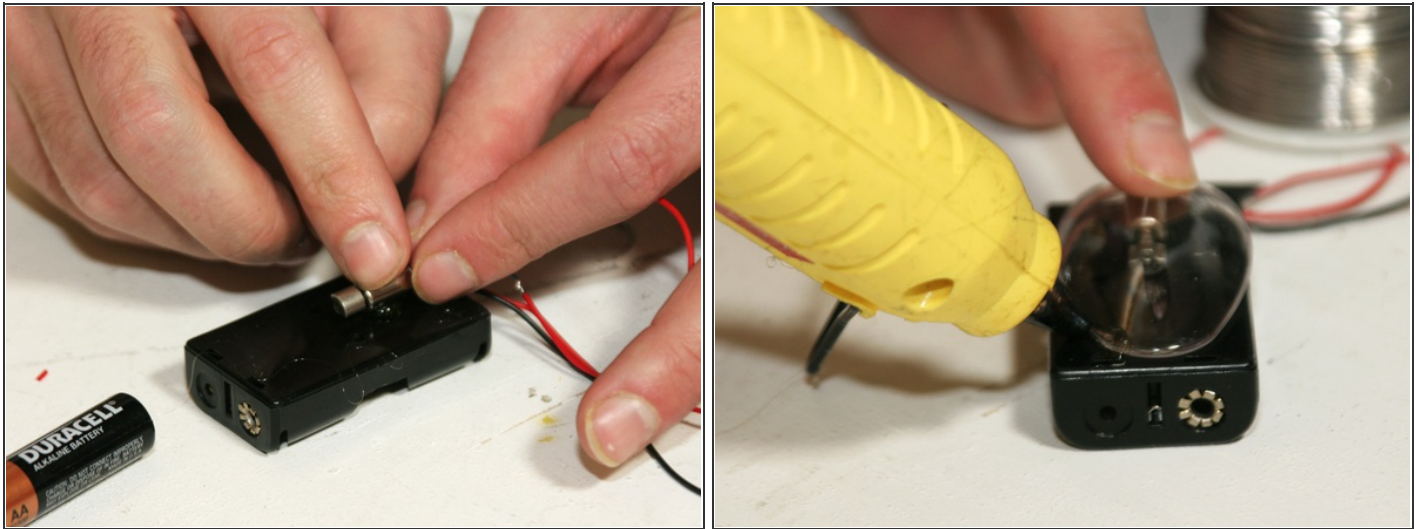
- Place the front and back pieces of the pillow together, with the fronts of the fabric (right sides) facing each other. Starting at one edge of the Velcro pieces, sew all the way around along the sew line. Make sure not to sew over the top of the Velcro or you won't be able to turn the pillow right-side out!

Step 5 — Solder the wires.



- Remember to never solder with anything in the “on” position. Take 1 wire from the battery holder, and solder it to 1 lead of the vibrator motor. It doesn't matter which battery wire goes to the motor — positive will make it spin one way, and negative will make it spin the other way, but it still vibrates the same. Then cut a piece of insulated wire 3"–4" long and strip the ends. Solder 1 end to the remaining lead of the motor. Tape these connections to prevent short circuits.
- Next, you must determine which of the cherry switch leads to solder to. If your switch has only 2 leads, those are the right ones. But if your switch has 3 leads, you need to test to see which 2 to use. Put batteries in the battery holder and hold the switch in the “on” position (you may need to tape it or get someone to help you). Hold the wire from the battery holder in one hand and the wire from the other lead of the motor in the other, and touch 2 switch leads at a time, in turn. One set of 2 leads will cause the motor to vibrate. Mark that set and remove the batteries.
- Solder the wires to your 2 cherry switch leads. It doesn't matter which wire goes to which lead here either. Test your motor again to make sure the circuit is working.

Step 6 — Attach and cover the motor.



- Hot-glue the motor body onto the back of the battery holder, making sure not to glue the part that rotates. To prevent the stuffing from catching in the motor, you need to cover the motor. We used the top of a plastic spoon, hot-glued on, but you can use parts of a plastic milk jug or anything that fits. Make sure there's enough room for the motor to rotate all the way around.

Step 7 — Assemble all the pieces.



- Reattach the cherry switch to the button assembly. Turn the fabric right-side out through the hole where you sewed the Velcro. Then stuff the pillow, close the Velcro, and play!

This project first appeared in [CRAFT Volume 07](#), pages 128-131.

This document was last generated on 2012-11-03 02:00:42 AM.